The Nuclide Removal System (NURES) technology uses ion exchange principles to selectively remove targeted radionuclides, providing more efficient treatment of contaminated liquids. At SRS, a 50 gpm, inorganic media system will be deployed to treat five million gallons of contaminated water using a "recycle" process. Selion Technologies, Inc. packages the technology as a skid mounted system making it highly mobile





Application:

NURES will be used to reduce Cs-137 and SR-90 levels in R Reactor Disassembly Basin water to near DOE release limits and prepare basin water for direct release

Benefits:

- Acceleration of processing time for the basin water treatment
- Lower secondary waste generation and disposal cost
- Allow for in situ treatment and reduce the risk of unexpected environmental release
- Reduction of potential impact on surrounding groundwater
- Lower operating costs through shorter and more efficient treatment of the basin water

Site Needs Addressed:

SR-4014 Basin Cleanup Technology



Planned Funding Profile (\$ in K)

| Cost Item | FY 1999 | FY 2000 | FY 2001 | Total Cost |
|----------------------|---------|---------|---------|-------------------|
| ASTD Project Funding | 200 | 275 | 75 | 550 |
| SRS Project Funding | 425 | 400 | 15 | 840 |
| Total Project Cost | 625 | 675 | 90 | 1,390 |

Projected Cost Savings of \$7.8 million

Project Schedule:

Award contract to Selion

Complete detailed design

Fabricate Components/Assemble System

Install and Start Up Equipment in R-Basin

Decontaminate 5 million gallons of disassembly basin water

Close R-Disassembly Basin

Tentative Dates

June 1999

August 1999

March 2000

April 2000

April 2000-

December 2000

FY01 and beyond



Points of Contact:

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